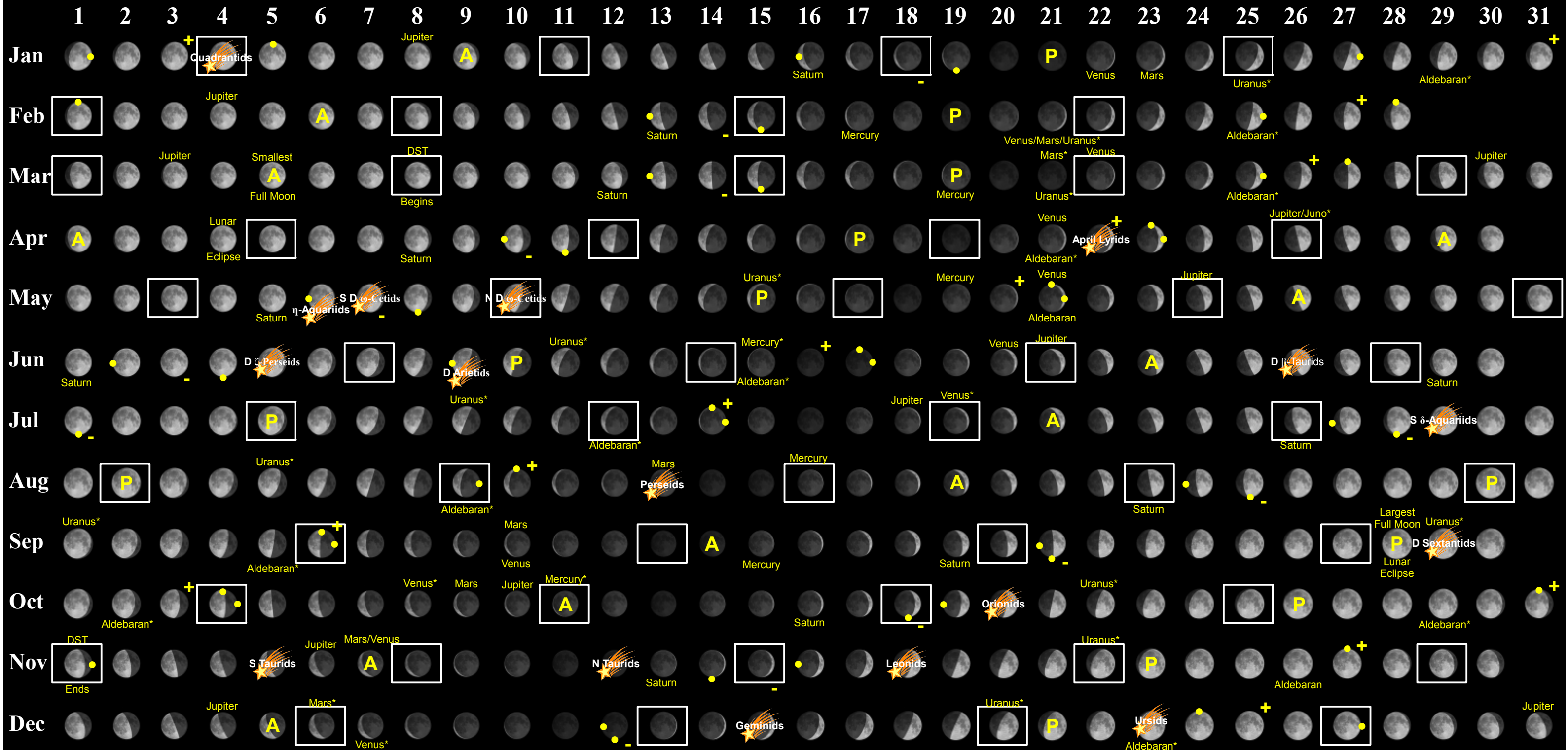


2015 Moon Phase Calendar

Newcastle Observatory
43° 54' 57" North, 78° 34' 59" West



This calendar uses Universal Time (UT). When an event takes place in the 0 to 5h UT range, it is on the previous date at 7 p.m. to midnight Eastern Standard Time (EST), 8 p.m. Daylight Savings Time (DST). For example, the Lunar eclipse on September 28 begins at 00:12 UT, which is 8:12 p.m. DST on the 27th. The phase of the Moon is depicted for each day of the year at 0h UT for mid-northern latitudes. Grey boxed phases are Sundays. The following circumstances occur on the UT date: The '•' symbol denotes maximum north, south, east and west limb exposed due to Lunar libration. The symbols '+' above and '-' below each phase denote the maxima and minima of the Moon's declination in each month. The letters 'A' and 'P' denote the Moon's Apogee (furthest from Earth) and Perigee (closest to Earth). Planets and bright stars within 10 degrees of the Moon are indicated as being above or below the Moon. An asterisk '*' indicates that the object will be occulted by the Moon in select geographic locations. Meteor showers are indicated by a "shooting star".